KEYSPAN ENERGY DELIVERY NEW ENGLAND
D.T.E. 01-105

FIFTH SET OF INFORMATION REQUESTS OF THE
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY TO
KEYSPAN ENERGY DELIVERY NEW ENGLAND

Pursuant to 220 C.M.R. § 1.06(6)(c) the Department of Telecommunications and Energy ("Department") submits to KeySpan Energy Delivery New England ("KeySpan" or the "Company") the following Information Requests. The instructions contained in the Department's First and Second Sets of Information Requests apply to these Information Requests.

Questions

D.T.E. 5-1 Please refer to Chart II-A-2 of the Company's filing. Please provide a sample "Daily Game Plan" reflective of actual conditions on a sample date.

D.T.E. 5-2 Please refer to pages 69 to 72 of the Company's filing. Please extend the Company's sensitivity analysis in order to determine, by quantitative analysis, which assumptions and inputs have the most influence on predicted net incremental load growth. Compare the relative importance of population growth, economic growth, behavioral trends, and energy prices. Please also qualitatively compare the potential importance of climate change, regulatory change, technological change, and competition, relative to the importance of the assumptions and inputs to be evaluated quantitatively by the Company.

D.T.E. 5-3 Please specifically identify the results of the XENERGY "Research for New Boston Gas Energy Demand Model" report that were used as inputs to the End-Use Model. Please identify the quantitative results that were used by the Company, indicate the XENERGY report page locations of such numerical values, and show how and where in the End-Use Model such numerical values were used.

D.T.E. 5-4 Please refer to D.T.E. 1-80. Please provide documentation showing the accuracy and precision of the visual inspection method for discerning patterns from scatter plot data.

D.T.E. 5-5 Please refer to D.T.E. 1-80. Please indicate whether the Company considers a statistical analysis of a small number of data points "dubious" (a) because the statistics might falsely conclude a relationship exists when there is none, (b) because the statistics may fail to identify an actual underlying relationship, or (c) for some other reason. In your answer, please state whether you are selecting (a), (b), or (c). In your answer, please also explain your selection.

D.T.E. 5-6 Please refer to D.T.E. 1-80 and pages 34 and 36 of the XENERGY report. Please perform a correlation analysis for the data presented in each of Figures 1 and 2. For the relationship(s) between oil/gas price ratio and number of residential space heating conversions, please provide the correlation coefficient *r*, and the *t*-statistic and statistical significance of the correlation.

D.T.E. 5-7 Please refer to pages 34 and 36 of the XENERGY report. Please indicate whether it is reasonable to expect that the residential space heating conversion rate is affected by the oil/gas price ratio, with or without regard to the statistical findings.

D.T.E. 5-8 Please indicate whether the statistical analyses performed for information request D.T.E. 5-6, above, demonstrate that a relationship described in answer to D.T.E. 5-7, above, exists or, alternatively, whether the statistics support or are consistent with such a relationship.

D.T.E. 5-9 Please refer to pages 34 and 36 of the XENERGY report. Please state whether it is possible to judge from available information whether any underlying relationship between oil/gas price ratio and number of conversions can be approximated as a straight-line type linear relationship or as a curved, nonlinear relationship. If the Company determines that it is possible to do so, please determine whether the relationship between oil/gas price ratio and number of conversions is or is likely to be curvilinear or a straight-line type linear relationship, using available information.

D.T.E. 5-10 Please compare the reliability, power, and accuracy of the visual discernment method of finding relationships with the reliability, power, and accuracy of a least-squares statistical regression.

D.T.E. 5-11 Please refer to D.T.E. 4-1. Please quantify the sensitivity of net incremental load growth, as predicted by the Company using the End-Use Model, to the estimated residential and commercial switch rates.

D.T.E. 5-12 Please refer to D.T.E. 4-1. With reference to the tendency that residential customers will continue with their current fuel regardless of the economics of fuel switching, how did this tendency evade capture in the development of the switch-rate formula provided in the XENERGY report prior to modification of the formula by KeySpan?

D.T.E. 5-13 Please refer to D.T.E. 1-77 and Attachment DTE 4-1(a).

(a) Please confirm that the Energy Information Administration monthly energy review for March 2002 shows residential oil prices as 2% to 18% above residential natural gas prices for the same period.

(b) Please state the reason(s) that the Company's calculated value of the oil/gas price ratio shows oil prices as 5% to 23% *below* gas prices for the years 1992 to 1997, if the Energy Information Administration indicated in March 2002 that residential oil prices as 2% to 18% *above* residential natural gas prices for the same period.

(c) The Company has stated that in the long run the price of natural gas and the price of heating oil tend to track each other. Please state the reason(s) that gas prices would be less than oil prices after 1998, if gas prices were above oil prices from 1992 to 1997, as shown on page 1 of 6 of Attachment DTE 4-1(a). Did gas abruptly become either more available or less desirable as a fuel, relative to oil?

(d) What does the horizontal line between 1998 and 1999, on page 1of 6 of Attachment 4-1(a), represent?

(e) What does the following notation on page 1 of 6 of Attachment 4-1(a) mean?

"*Calculations - Standard:*

Slope	*221*
Intercept	*323*"

(f) Please provide a key to identify EndUse 1 and EndUse 2; Fuel 1 and Fuel 2; Categories 1, 2, and 3; New Fuels 1 and 2; and NewCats 1 and 2.

D.T.E. 5-14 Please refer to DTE 4-1 and Attachment DTE 4-1(a).

(a) What is the chance that the calculated switch rate would be the same value, 2.08%, seven out nine years, if the values were independently calculated from varying oil/gas price ratio projections?

(b) With reference to the Switch Factors Table, what would be the switch percentage(s) from oil to gas for residential space heating in the Essex Division for each of the years 1997 through 2006?

(c) With reference to the Switch Factors Table, what would be the switch percentage(s) for End Use 1, Fuel 7, and Category 1, for each of the years 1997 through 2006?

D.T.E. 5-15 Please refer to D.T.E. 4-1 and Chart III-B-5 of the Company's filing. Please describe how KeySpan translated the eight different percentage figures for each year, shown on pages 2 of 6 and 3 of 6 of Attachment DTE 4-1(a), to a single gross (or net) annual addition number in BBtu for each year on Chart III-B-5 of the Company's filing. Please show all of the relevant calculations.

D.T.E. 5-16 Please refer to D.T.E. 4-1 and Chart III-B-5 of the Company's filing. Please state whether any switch rate projections were used to estimate gross annual additions listed for apartments. Please explain.

D.T.E. 5-17 Please refer to Chart III-B-5 of the Company's filing.

(a) Please calculate the expected percentage "traditional total" net annual additions to base case load for each of the years 2002 through 2006.

(b) Please calculate the expected average annual percentage growth rate for the period 2002 to 2006.

(c) Please compare the percentage growth rates calculated in (a) and (b) above to historic growth rates in the Company's service territories.

D.T.E. 5-18 Please refer to page 38 of the Company's filing. Please present the algorithms used by the Company in its End-Use Model.

D.T.E. 5-19 Please refer to page 48 of the Company's filing. With respect to the sensitivity of demand to burner-tip natural gas prices, please indicate whether the burner-tip prices identified by the Company reflect marginal or average prices to the consumer.

D.T.E. 5-20 Please discuss any new changes that the Company made to the End-Use Model since the approval of Boston Gas' last Forecast & Supply Plan.